

SUMMARY OF HYDROLOGIC CONDITIONS IN BIG CYPRESS BASIN

March, 2010

SUMMARY

March 2010 became the wettest dry month season in over 12 years in South Florida. Much cooler than normal temperatures prevailed throughout the Basin. Surface and groundwater levels were slightly above long term average March conditions. Most of the water control structures were operated on normal dry season schedules. Pumping operation was performed on only one of the Basin's four pumpstations. Year round water restrictions continued across southwest Florida.

RAINFALL

Continued systems of moderately strong cold fronts penetrated deep into South Florida during March and the associated moisture generated several rainfall events across the Basin. Most of the region received rainfall ranging from four inches to eight inches during the month. The weighted average rainfall of 14 reporting stations across the Basin was 6.49 inches, or approximately 167 percent above normal rainfall for March. Year to date rainfall is nearly 100 percent above normal. A summary of rainfall recorded at various stations across the Basin is illustrated in Table 1 and Figure 1.

STREAMFLOWS AND GROUNDWATER LEVELS

Surface and groundwater levels in the canals, streams and regional aquifers received recharge from the month's rainfall, and stayed at considerably above normal March levels. All of the water control structures were functioning on dry season operating schedules. The controlled release of freshwater earlier during the wet season, along with the raised dry season water control levels in the modified weir system resulted in above average storage in the Golden Gate canal. A summary of the surface water stage hydrographs at selected locations

is illustrated in Figures 2 and 3. Only one of the four pump stations was operated.

The regional groundwater levels in the surficial water table aquifer recorded an average rise of 0.42 feet and the Lower Tamiami aquifer wells recorded an average rise of 1.2 feet from the previous month. Hydrographs of selected key indicator wells are illustrated in Figure 4. Year round water restriction continued across southwest Florida. The District staff has aggressively reminded residents to cut back on water use as far as practicable.

WATER USE

The average daily raw pumpages by the major public water utilities in the Basin during March 2010 are as follows:

Average Daily Raw Water Pumped (MGD)

Utility	March 2010	March 2009
1. City of Naples Water Utility	14.89	17.84
2. Collier County Utilities	N/A	41.83
3. Marco Island Water Utility*	5.70	5.48
4. Immokalee Water & Sewer District	N/A	2.53

* Surface water only.

Hydrologic Report Station Map

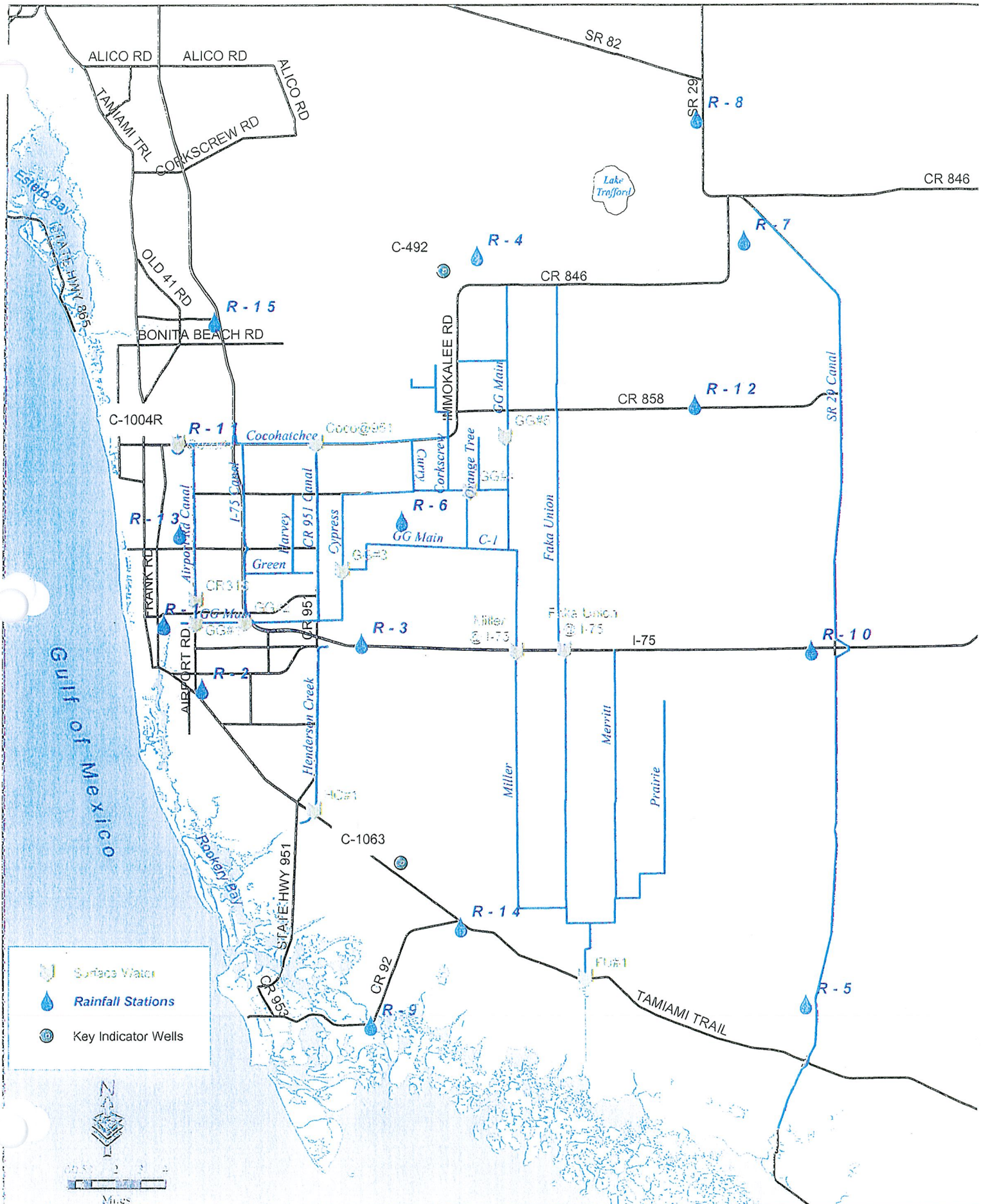


TABLE 1
RAINFALL REPORT - MARCH 2010
DISTRICT/BASIN RAINFALL STATIONS
 (ALL NUMBERS ARE IN INCHES)

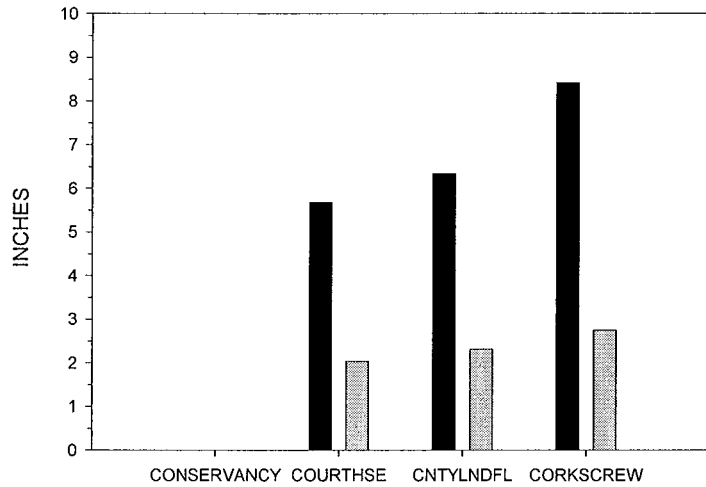
STATION INDEX NO.	STATION NAME	CURRENT MONTH 2009	LONG TERM AVERAGE FOR THIS MONTH	MONTHLY DIFFERENCE	CALENDAR YEAR 2009 CUMULATIVE TOTAL	AVERAGE CALENDAR YEAR TO DATE	YEAR TO DATE DIFFERENCE	LONG TERM YEARLY AVERAGE
R-1	CONSERVANCY	Site off line	Gauge relocation					52.55
R-2	COLLIER COUNTY COURTHOUSE	5.68	2.04	3.64	11.75	5.72	6.03	51.49
R-3	COLLIER COUNTY LANDFILL	6.34	2.32	4.02	11.28	6.59	4.69	62.3
R-4	CORKSCREW SWAMP	8.42	2.75	5.67	15.38	7.49	7.89	58.5
R-5	FAKAHATCHEE STRAND STATE PRESERVE	7.76	2.50	5.26	12.07	6.34	5.73	62.05
R-6	GOLDEN GATE FIRE STATION #2	5.57	2.38	3.19	11.80	6.00	5.80	57.96
R-7	IMMOKALEE LANDFILL	5.92	2.80	3.12	12.78	6.85	5.93	52.13
R-8	IFAS	8.69	2.90	5.79	13.63	6.94	6.69	50.25
R-9	MARCO ISLAND R.O. PLANT	8.35	1.97	6.38	14.21	6.46	7.75	53.77
R-10	FAKAHATCHEE NORTH END	8.37	2.56	5.81	17.67	7.09	10.58	61.09
R-11	COCOHATCHEE STRUCTURE #1	5.24	2.31	2.93	9.62	5.81	3.81	47.59
R-12	AVE MARIA	5.94	2.62	3.32	11.14	6.64	4.50	55.34
R-13	BCB FIELD STATION	4.66	1.99	2.67	8.78	6.05	2.73	54.93
R-14	COLLIER/SEMINOLE STATE PARK	6.32	2.22	4.10	12.33	5.38	6.95	54.89
R-15	BONITA SPRINGS WATER PLANT	3.60	2.61	0.99	6.06	6.76	-0.70	53.34

Averages	6.49	2.43	4.06	12.04	6.44	5.60	55.21
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MONTHLY AND YEAR-TO-DATE RAINFALL AT SELECTED LOCATIONS

MARCH 2010

MONTHLY TOTAL RAINFALL



RAINFALL TO DATE, YEAR 2010

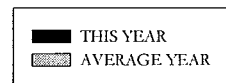
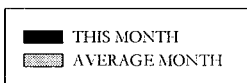
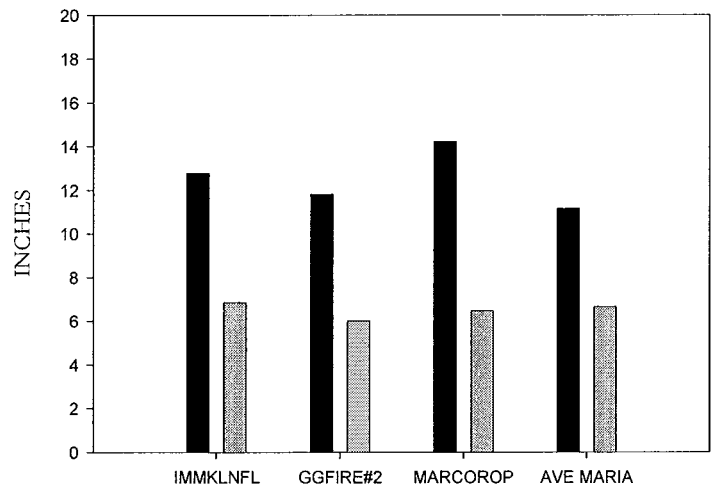
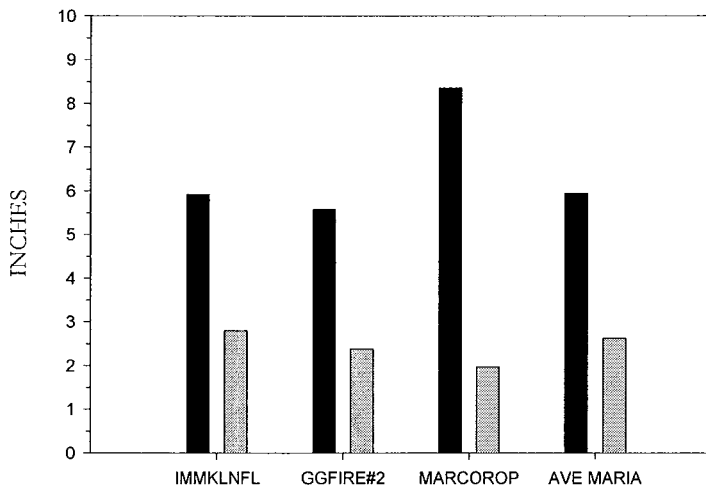
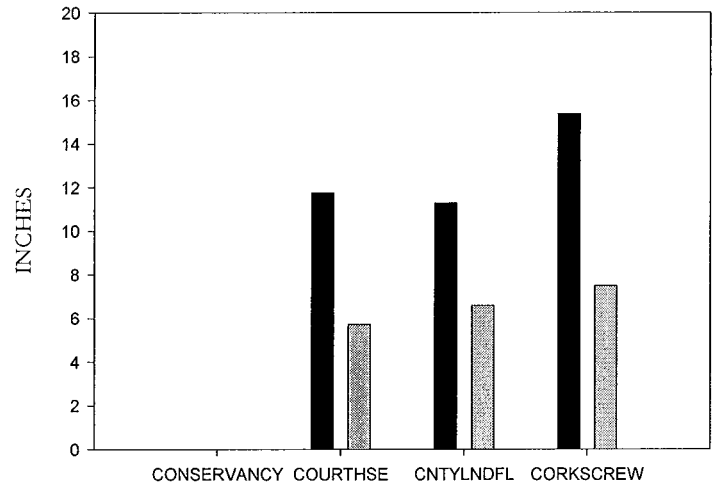
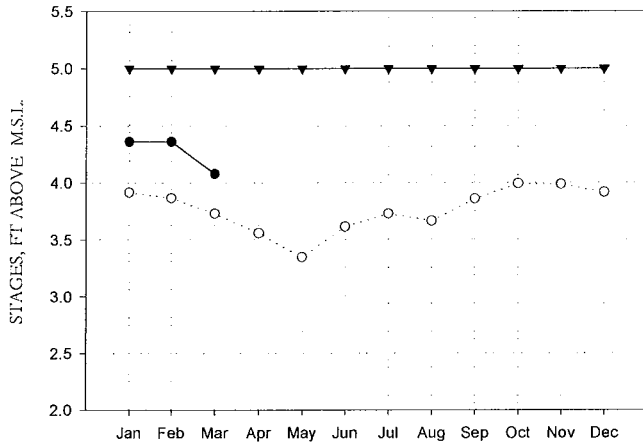


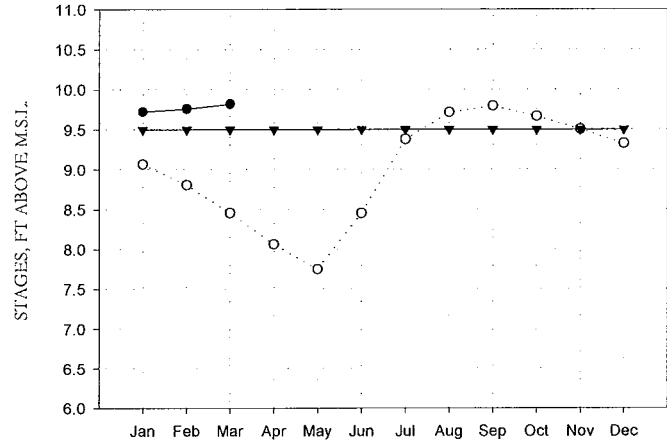
FIGURE 1

MONTHLY MEAN CANAL STAGES AT SELECTED LOCATIONS 2010

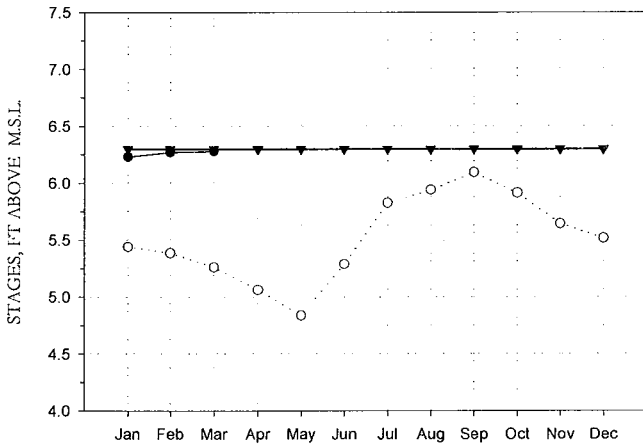
GOLDEN GATE CANAL AT WEIR 1



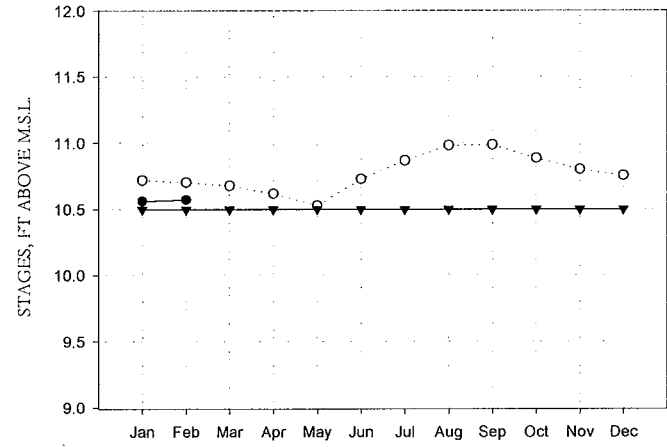
GOLDEN GATE CANAL AT WEIR 4



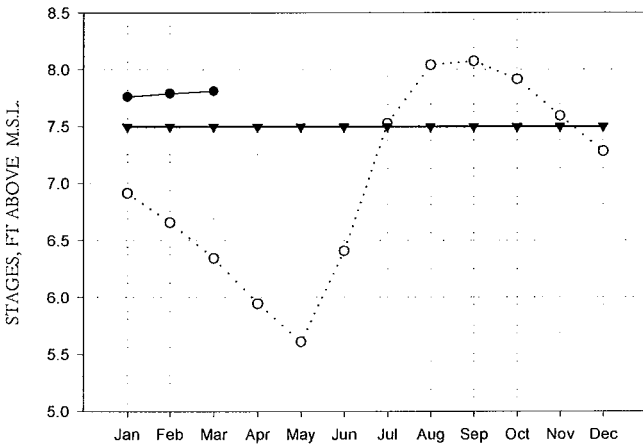
GOLDEN GATE CANAL AT WEIR 2



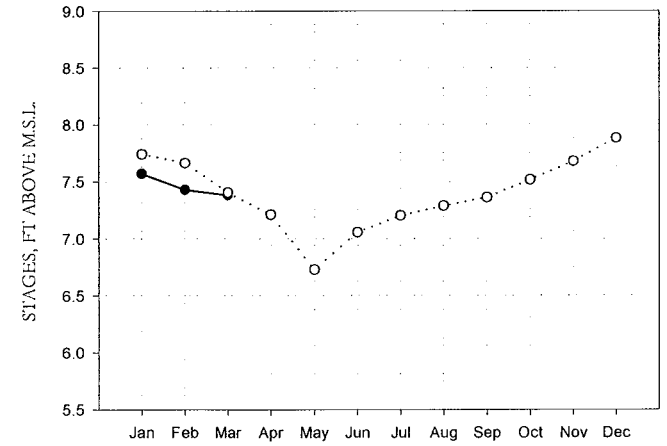
GOLDEN GATE CANAL AT WEIR 5



GOLDEN GATE CANAL AT WEIR 3



AIRPORT ROAD CANAL AT CR 31 SOUTH



—●— THIS YEAR: 2008
 - - - ○ - - - LONG TERM AVERAGE
 —▼— WEIR CREST

FIGURE 2

MONTHLY MEAN CANAL STAGES AT SELECTED LOCATIONS 2010

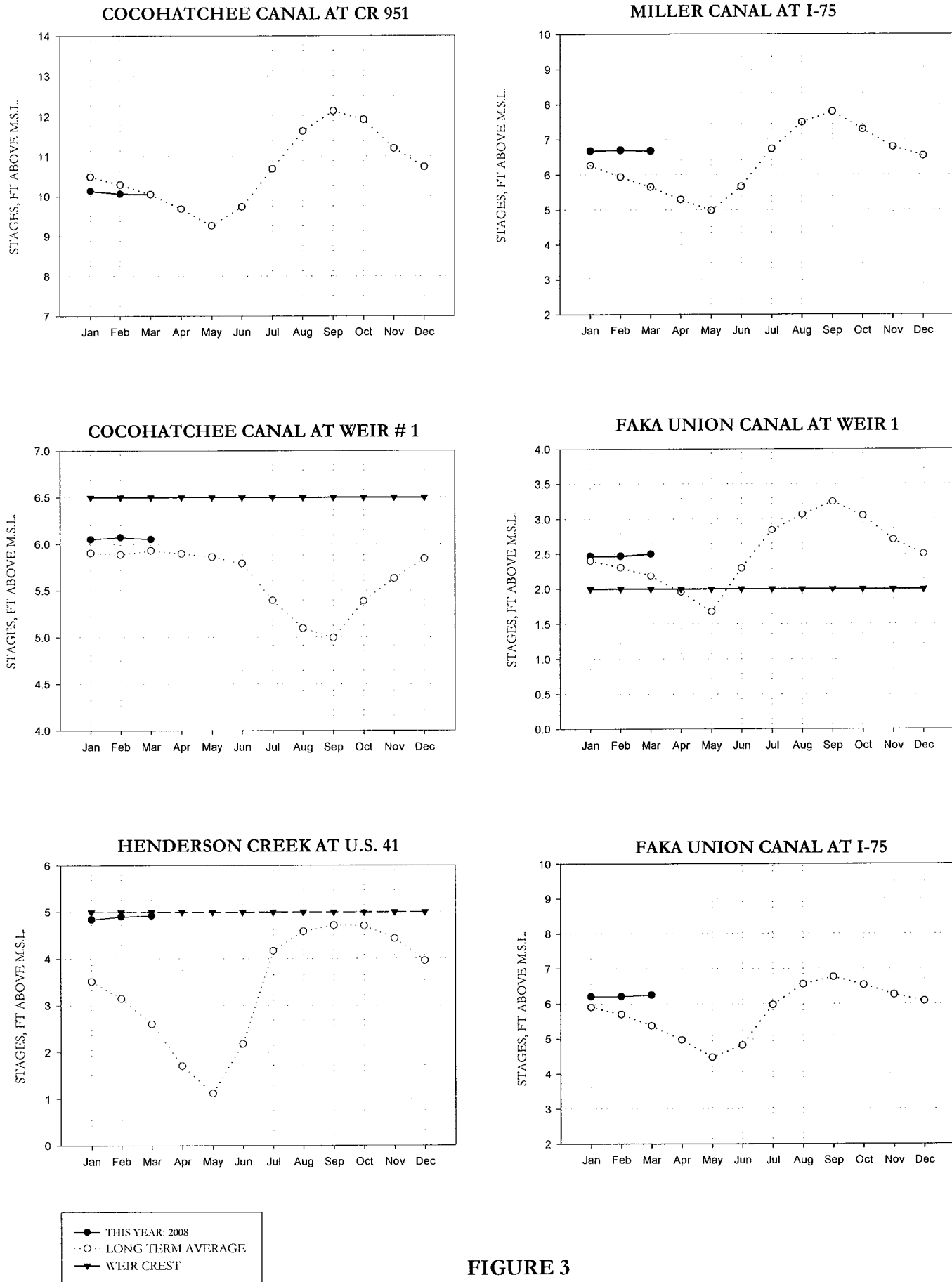
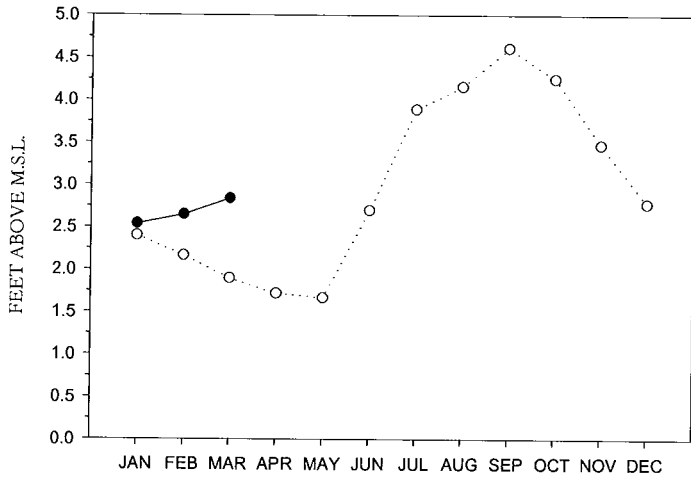


FIGURE 3

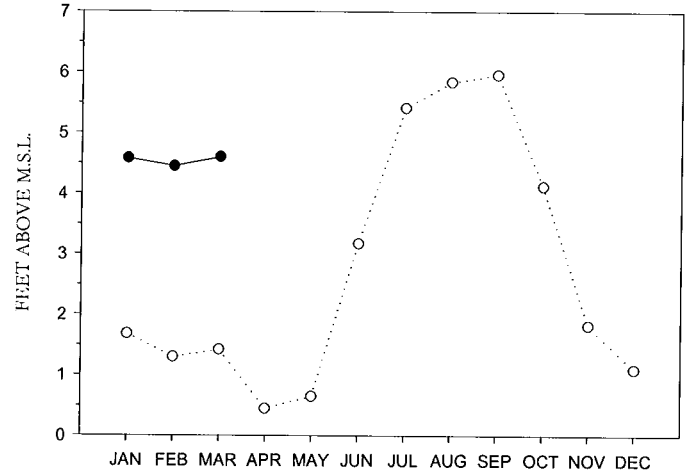
GROUNDWATER LEVELS AT SELECTED LOCATIONS 2009

GROUND WATER LEVELS AT WELL C-1063
NEAR SIX Ls FARM ON US 41 EAST



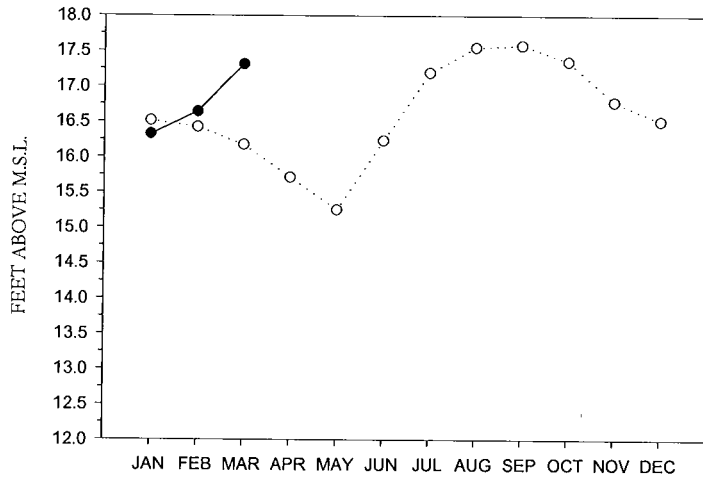
WATER TABLE AQUIFER

GROUND WATER LEVELS AT WELL C-1004r
PALM RIVER BOULEVARD, NORTH NAPLES



LOWER TAMAMIAMI AQUIFER

GROUND WATER LEVELS AT C-492
CORKSCREW SWAMP SANCTUARY



LOWER TAMAMIAMI AQUIFER

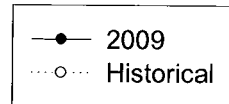


FIGURE 4

WATER USE BY MAJOR PUBLIC UTILITIES 2010

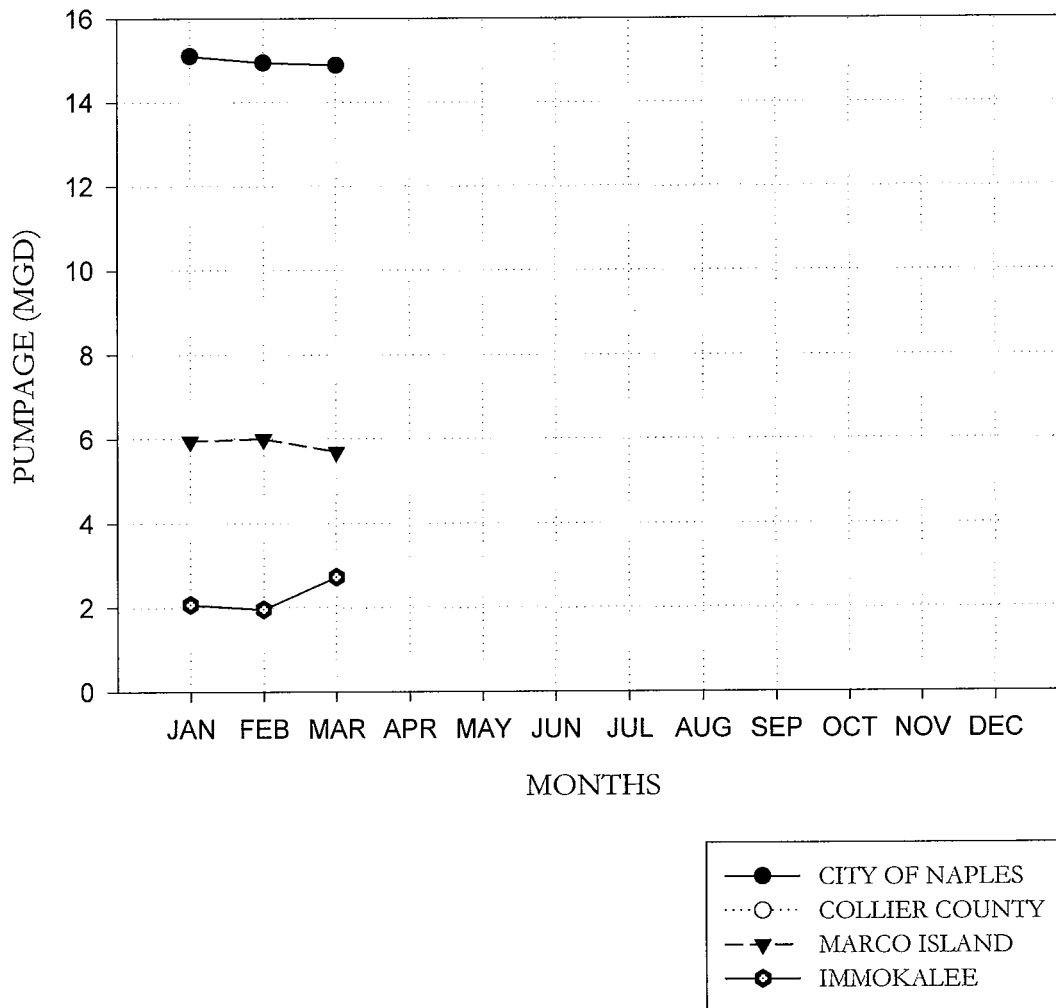


FIGURE 5